

REMARKS

This is in response to the Office Action dated September 22, 2005. Claims 4 and 8 have been canceled. Thus, claims 1-3 and 5-7 are now pending.

As an initial housekeeping matter, it appears as if the Examiner has not cited Sekoguchi on a PTO-892. Thus, it is respectfully requested that the Examiner cite the Sekoguchi reference on a PTO-892 and provide the undersigned with a copy of the same.

Drawings

The drawings stand objected to on pages 2-3 of the Office Action because the drawings do show certain claimed elements. For example, the drawings do not show air conditioning equipment or inlets in air conditioning equipment as recited in dependent claims 5-7. This drawing objection is respectfully traversed. Air conditioning equipment is a feature that is well known in the art, such that drawings are not needed for understanding of the same. Drawings are not a requirement under the statute, and many patents do not even have drawings. 35 U.S.C. Section 113 makes clear that drawings are only needed when "necessary for the understanding of the subject matter sought to be patented." In this case, drawings are not necessary for the understating of the well know and common air conditioning equipment. Accordingly, it is respectfully requested that the drawing objections be withdrawn.

Objection to Specification

The Examiner objects to paragraph [0041] of the specification, and states that it is confusing. See page 3 of the Office Action. This formality objection is respectfully traversed.

Paragraph [0041] of the specification is fairly clear in that when positioned next to an air conditioner inlet, the outlet 13a of the main body is adjacent the inlet of the air conditioner, and the inlet 14a of the main body is further from the air conditioner inlet. Thus, air first flows into

inlet 14a, then through the main body where dust can be measured, then through outlet 13a, and then into the air conditioner inlet.

Additionally, the positional relationship of the air conditioning equipment and the small passage hole 14 and large opening 13a of the optoelectronic sensor is clear from the following portion of paragraph [0041]: “small passage hole 14a being directed toward the bright outside of the air conditioning equipment, and large opening 13a being directed toward the dark air-inlet side (i.e., inside) of the air conditioning equipment, the level of exterior light incident at main body housing 12 by way of small passage hole 14a is reduced, decreasing likelihood of occurrence of mistaken detection of dust and/or smoke at light-receiving unit 16.” There is nothing unclear about paragraph [0041] of the specification.

Section 112 Rejections

Claims 3, 5 and 7 stand rejected under Section 112, first and second paragraphs, on pages 4-5 of the Office Action. These Section 112 rejections are respectfully traversed for at least the following reasons.

Claim 3 has been amended to make clear that at least one of the openings is provided with at least one sliding cover. E.g., see paragraph [0042] of the instant specification for example non-limiting support.

Claims 5 and 7 have been amended to address and overcome any potential issue in this respect. The positional relationship of the air conditioning equipment, small passage hole and large openings of the optoelectronic sensor is now clear. E.g., see paragraph [0041] of the instant specification for example non-limiting support for this.

Art Rejections

Claim 1 stands rejected under 35 U.S.C. Section 102(b) as being allegedly anticipated by Yang. Claim 1 also stands rejected under Section 103(a) as being allegedly unpatentable over Best and Sekoguchi. These art rejections are respectfully traversed for at least the following reasons.

Claim 1 has been amended to require “at least one detection report means for detecting and reporting at least one large amount(s) of dust accumulated at the interior of at least one of the main body housing or housings of the optoelectronic dust sensor; and wherein said detection report means keeps track of a time during which a signal level from the light-receiving unit is maintained at or above a predetermined level, and when the time exceeds a predetermined threshold said detection report means reports that a large amount of deposit(s) may have collected within the main body housing(s).” E.g., see paragraphs [0032] and [0036] of the instant specification for example non-limiting support in this respect.

Each of Yang, Best and Sekoguchi fail to disclose or suggest the aforesaid underlined features of amended claim 1. In particular, none of the cited references disclose or suggest keeping track of a time during which a signal level from the light-receiving unit is maintained at or above a predetermined level, and when the time exceeds a predetermined threshold said detection report means reports that a large amount of deposit(s) may have collected within the main body housing(s), as required by claim 1. The cited references are entirely unrelated to the invention of claim 1 in these respects.

Conclusion

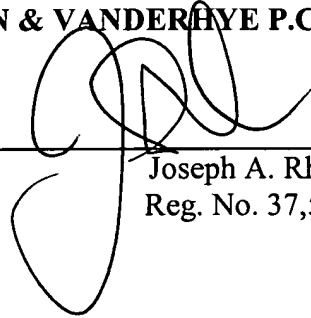
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It is respectfully requested that all rejections be withdrawn. All claims are in condition for allowance. If any minor matter remains to be resolved, the Examiner is invited to telephone the undersigned with regard to the same.

Respectfully submitted,

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